Copper Valley ELECTRIC

A Touchstone Energy® Cooperative

Electrical Service Requirements
Service Assembly Guide

811 Know what's below. Call before you dig.

GLENNALLEN OFFICE
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INTRODUCTION

Copper Valley Electric Association (CVEA) assembled this booklet to assist members, Architects, Engineers, and Electrical Contractors in planning for, or obtaining electric service to new or remodeled installations.

The information presented is intended to supplement and not replace the requirements of the National Electrical Code (NEC), the National Electrical Safety Code (NESC), and all other applicable Federal and State codes, regulations, and ordinances.

More information relating to construction may be found on the CVEA website, https://www.cvea.org/member-services/obtaining-new-service/construction.html

If there is a conflict in requirements between this guide and CVEA's Tariff, then the Tariff, shall take precedence.

This 2026 edition of the Electric Service Requirements booklet supersedes all previous specifications or service information.

CVEA strives to serve its members promptly and satisfactorily in completing electric service connections. CVEA will gladly give attention to any questions concerning the requirements in this booklet.

Please note: If located in Valdez, the meter base shall be inspected by the City of Valdez (the City) prior to CVEA's service installation.

CVEA CONTACT

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SECTION 100 GENERAL INFORMATION

101 Purpose

The purpose of this booklet is to inform members, consultants, and contractors of the requirements for obtaining electric service from CVEA. Prior to purchasing any electrical equipment for a proposed installation or beginning construction, a member and/or their representative should contact CVEA's Construction Department to learn the general requirements for obtaining service and to obtain the most current meter specifications.

Additional information is available on the CVEA website at www.cvea.org. This booklet is not intended to ensure the adequacy and safety of the member's wiring and equipment; such responsibility remains with the member. Also, CVEA does not perform the function of inspecting the member's internal wiring for compliance with requirements of electrical codes or regulations established by public bodies. CVEA does recommend that all installations be inspected by the appropriate governing authority.

SECTION 200 SERVICE

201 Character of Service

All electric services are delivered at 60 Hertz (cycles/sec) from the integrated electrical transmission and distribution network. Electric service is available as single or three phase from an overhead or underground distribution system at one of the nominal American National Standards Institute (ANSI) standard voltages as given below.

202 Types of Service

The following are standard voltages and capacities available for metering to CVEA members:

1. Single Phase 120/240 volt, three wire standard lighting and power service up to 800-amp capacity only.
2. Single Phase 120/208 volt, three wire standard lighting and power service, 200-amp capacity.
3. Three Phase 277/480 volt, four wire grounded wye to meet member requirements.
4. Three Phase 120/208 volt, four wire grounded wye to meet member requirements.
5. Three Phase 120/240 volt, four wire delta to meet member requirements. Note: Motors of 9.9 HP or less rating may be served with single phase. If 10 HP or greater, service must be three phase. This requirement may be waived by CVEA when CVEA, in its sole discretion, deems it appropriate under the circumstances. The Association may require the member to install reduced voltage starting equipment (variable speed drives) where across-the-line starting would cause excessive voltage disturbances.

Service Equipment

Service equipment must be installed by the member and inspected and approved by CVEA's Construction Department prior to service being scheduled for construction. Please review the applicable specification in this booklet that pertains to the service required.

Meter Accessibility/Location

A meter base must be installed in a location accessible to CVEA at all times. A meter will be installed on the outside wall of a building, on a meter stub, or on a secondary pole (customer meter pole). All locations must be approved by CVEA Construction.

The member will furnish a location that is safely accessible by Association employees, free from vibration, corrosive atmosphere, abnormal temperatures, protected from adverse climatic conditions or aggressive domestic animals and located near the corner of the structure nearest to the existing distribution facilities of the Association. **All locations are subject to approval by the CVEA Construction Department.**

Examples of **acceptable** locations for a meter base include:

1. An outside wall, stub post, or meter pole.
2. In an area that is not fenced-in or enclosed.

Examples of locations that are **not acceptable** for a meter base include:

1. In or under enclosed porches or breezeways.
2. In or under carports or decks.
3. Under rain gutter down-spouts or other drains.

Route Selection and Clearing

The CVEA Construction Department will approve the route for the line extension and/or service. A clear and unobstructed route must be provided for CVEA to construct a service or primary line within the boundaries of the member's property by the member.

203 Temporary Construction Power

CVEA will connect a member-furnished, single phase 120/240-volt temporary meter base with total capacity of 200 amps per delivery point for a period not to exceed twelve (12) months. In any event, this service shall not continue longer than 18 months.

CVEA Tariff:

> *When an applicant requests service for a period of one year or less, the applicant will be required to pay, prior to installation, a contribution-in-aid-of-construction in an amount equal to the total estimated cost of both the installation and removal of the facilities necessary to provide such service. The applicant shall bear the cost of any unusual or unsalvageable materials. Service under this provision may not exceed one year unless good cause is shown by the applicant and the Association agrees in writing to extend the period for temporary service. Service for a subsequent period shall not exceed six months. Service under this provision may not exceed one year without good cause shown and with the concurrence of the Association. Service for a subsequent period is not to exceed six months*.

204 Member Equipment

1. Before any new service entrance equipment is installed the member should have the installation location approved. Where substantial changes will be made to an existing service, the member, builder or authorized representative shall contact CVEA for a temporary disconnect and/or approval.
2. To help prevent damage, always call the Alaska DigLine (Dial "811") at least 48 hours before digging, excavating or driving ground rods to obtain locates prior to commencing any of these activities.
3. The member shall install and maintain all wiring equipment beyond the point of delivery except for meters, current transformers, and all wiring associated with the metering. The point of delivery, unless otherwise specified, is that location on the exterior of the member's building or on an approved structure where CVEA's system and the member's facilities are

interconnected.

4. Member's wiring, meter socket and service entrance facilities must be installed and maintained by the member in conformity with applicable state requirements, current standards required by the National Electrical Code (NEC), the National Electrical Safety Code (NESC), CVEA's Electric Service Requirements and all other federal, state, and local codes as applicable.
5. CVEA shall inspect all residential meter bases prior to job being released to construction. CVEA may refuse to connect service if member's meter base is found to be non-compliant with codes and/or CVEA specifications.
6. The member is responsible for providing suitable protective devices for the equipment on the member's premises. The member shall protect equipment with special service requirements from potentially harmful conditions, including, but not limited to, single phase operation of equipment requiring three phase service or under-and-over voltage conditions.
7. CVEA representatives do not have authority to provide guidelines for the member side of the meter base, e.g., wire size, expected load, etc.

205 Service Facilities on Member's Premises

1. All facilities furnished by CVEA on the member's premises shall remain the property of CVEA and may be removed, replaced, or updated by CVEA at any time. The member shall provide sufficient space for CVEA to access CVEA's property and protect CVEA's property located on the member's premises. In addition, the member shall not break CVEA's equipment seals. The member shall be liable for loss or damage to CVEA property arising from neglect, carelessness, vandalism, improper protection from ice, snow and water, or misuse by the member or any other person on the member's property.
2. Tampering with meters is prohibited by CVEA and is a civil offense under Alaska law (see AS 42.20.030 et seq.). Any tampering, breaking of meter seals, opening or damaging of CVEA locks, interference with, or any work performed upon the meter installation or other property of CVEA is prohibited. CVEA may, at any time, and without notice, discontinue supply of service to the member and remove the meter or meters and equipment in the event of such tampering or interference. The member shall be responsible for payment of all costs which result from such tampering or interference with CVEA property. Those costs may include, but are not limited to, disconnection and reconnection charges, investigation related costs, damage to CVEA property, and payment for service consumed but not metered. Service will not be restored to the member until payment has been made to CVEA for all costs.
3. On underground service installations requiring pad mounted equipment (or any other above-grade equipment such as secondary pedestals), the member is required to furnish an accessible and safe location for the pad mounted equipment on the member's property. All pad mounted equipment site locations must be approved by CVEA. CVEA will not install pad mounted equipment on property, other than that of the member, unless there is a recorded public utility easement (e.g., in a street or alley right-of-way, or on an adjacent neighbor's property). There should be a minimum clearance at all times from trees, shrubs and building walls of 10 feet in front of the pad mounted equipment and three feet on each of the other sides. Clearance above the pad mounted equipment should be sufficient to provide crane clearance for installation and replacement. Where required, the member shall install, at the

member's expense, suitable protective or security devices designated by CVEA on the member's premises (such as bollards).

4. Properly identified employees of CVEA shall have access to member premises at all times for the purpose of reading meters, testing or inspecting the member's load and equipment, or installing, repairing, removing or exchanging equipment belonging to CVEA. The member shall not construct or have any device, building, fence, shrubs, trees, etc., that would impede utility access to CVEA equipment.

206 Electrical Standby Generators

No member shall, without CVEA's prior approval, temporarily or permanently connect any electric generator to wiring which is intended to be energized at any time from CVEA's system. Proper sectionalizing and protective equipment must be installed in conformance with applicable federal, state codes and CVEA service requirements.

207 Work Requirements in Proximity to CVEA Facilities

All work on or in the immediate vicinity of CVEA facilities, such as backfilling or cuts, tree trimming or falling, temporary support, shoring and relocations are subject to prior approval and inspection by CVEA. Individuals who cause CVEA facilities to be damaged will be charged the cost of repairing damaged facilities. Contact CVEA prior to commencing construction or equipment operating, near or around of any underground or overhead facilities. Alaska Statute AS 18.60.670* requires a 10-foot minimum operating clearance from all energized overhead conductors.

*AS 18.60.670. Prohibition against Placement of Equipment Near Electrical Power Lines and Conductors.
A person individually or through an agent or employee may not: **(1)** place any type of tool, equipment, machinery, or material that is capable of lateral, vertical, or swinging motion, within 10 feet of a high voltage overhead electrical line or conductor; **(2)** store, operate, erect, maintain, move, or transport tools, machinery, equipment, supplies, materials, apparatus, buildings, or other structures within 10 feet of a high voltage overhead electrical line or conductor.

SECTION 300 INSPECTIONS

301 General Information

Prior to connection of electric service, the member/applicant's meter base must be inspected by CVEA Construction Department. CVEA will not inspect the member side of the meter base or wiring. The following type of work will require an inspection:

1. All new services must be inspected by CVEA.
2. Service entrance equipment or meter base assembly that has been replaced, upgraded or relocated.
3. The service line has been disconnected at CVEA's facilities for repairs or rewiring at member's building or service location.
   Note: If located in Valdez, the meter base shall be inspected by the City prior to CVEA's service installation.

302 Electric Service Inspection Requirements

The meter base will be inspected for compliance with the CVEA meter base specifications. No service or line extension will be released for construction until the meter base has met the CVEA specification completely.

The service standards, equipment specifications and guides are not engineered drawings. They are reference drawings intended to assist the member or the member's engineer and to meet CVEA requirements. Any resulting member installation requires compliance with State or Federal regulations and requires compliance with the National Electrical Safety Code and the National Electric Code as adopted by regional authorities.

SECTION 400 GENERAL SERVICE GUIDELINES

401 General Information

Residential Services

1. Prior to wiring a building, performing electrical construction for a new service, or remodeling an existing service, the member shall obtain approval from CVEA for the location of all meter bases.
2. The member's service equipment shall conform to the latest revision of the National Electrical Code, Municipal local amendments to the NEC, and State and Municipal Codes.
3. New or remodeled installations must conform to current and applicable provisions of the National Electrical Code and any other city, state, or federal regulation.
4. If the roof overhang is less than 2 feet, member will provide meter base protection from snow and ice. An acceptable alternative is a protective hood extending 6 inches out from face of meter and minimum of 6 inches on each side of the meter base.
5. Two ground rods with ground rod clamps and a ground conductor shall be furnished and installed by the member. The solid copper ground conductor must be continuous (having no cuts) between the meter base and the two ground rods. Ground conductors cannot be placed behind the siding.
6. The meter base shall be securely fastened to the wall.
7. The source side conduit risers will be provided and installed by the member.
8. All wiring on the breaker side of the meter base is the responsibility of the member, for both installation and maintenance. CVEA personnel are not allowed to work on the member's wiring. If any unsafe wiring is identified, CVEA will not connect service until it has been corrected by the member.
9. The face of the meter base will be in a direction that is most advantageous for maintenance or reading of the meter, where applicable.
10. All meter bases must be inspected by a CVEA representative prior to the service being scheduled for installation.

Overhead Services

1. Weatherheads that exceed 36 inches above the roof must be guyed. Weatherheads lower than 36 inches may require guying based on design criteria. Contact the CVEA Construction Department for service requirements.
2. Minimum overhead service conductor clearances:
   a. 3.5' crossing over the roof of an unattached structure, roof not readily accessible.
   b. 10' above grade at the service weatherhead (drip loop) up to 150 volts phase to ground. If over 150 volts up to 300 volts phase to ground, 12' is necessary.
   c. 16' clearance above non-residential driveways, parking lots and areas subject to truck traffic.
3. The member's neutral wire shall be identified at the weatherhead as the white or striped wire. Four wire (Quadruplex) shall not be used for single phase.
4. Conduit riser clamps must be made of heavy gauge galvanized steel or malleable iron. Use 2-hole pipe clamps spaced not more than 6 feet apart on center and one within 12 inches of a conduit coupling, weatherhead (if gable mounted) or meter base hub. The clamps shall be securely attached with either lag screws into the solid wood framework or toggle bolts into siding (concrete anchors are required for masonry). These are customer provided and

installed.

5. Service riser conduit shall be galvanized rigid steel only and shall have a minimum diameter of 2 inches. No conduit couplings will be allowed above the roofline.
6. Where the length of the conduit riser exceeds 10 feet, the coupling shall be located on the end closest to the meter base.
7. For a gable mount weatherhead: A 5/8 inches galvanized steel eyebolt, mounted with 2 inches square galvanized steel washers, shall be installed into suitably braced framework. The point of attachment shall be a minimum of 12 feet 6 inches above grade and shall not extend more than 12 inches below the weatherhead.

Temporary Construction Meter Base

1. The temporary meter base can be placed within 10-15 feet of the CVEA source. Member must have enough wire and corflo to extend 10 feet beyond the power source. If the area is served by overhead, contact the Construction department for more detailed information.
2. Temporary service is available as single phase, 200-amp 120/240 volt. Three phase temporary service may be available upon CVEA approval.
3. The base of the temporary meter base must be constructed in accordance with drawing SS-16.

Multi-Meter & Commercial Installations – General Requirements

1. CVEA meters shall be located on the outside of the building, or other approved structures, and accessible by CVEA personnel.
2. The member's service equipment shall conform to the latest revision of the National Electrical Code, Municipal local amendments to the NEC, and State and Municipal Codes.
3. The member shall provide a NEMA Type 3R, wall mounted pull box with terminals a sealable and lockable bussed gutter specifically designed for ganging individual meter sockets under a common feed.
4. The bussed gutter shall have an ampere rating equal to or greater than the total ampere rating of the meter pack, which are installed and served from the bus.
5. Ring style sockets and removable panel covers must be compatible with and not interfere with the tamper proof meter sealing rings.
6. Network services require a factory installed 5th jaw or a factory supplied 5th jaw kit to be installed in the 9 o'clock position.
7. For 3-phase, 4-wire services supplied from a Delta connected secondary, the phase conductor having the higher voltage to ground (power leg) shall be located on the center phase of the circuit breaker lug of each meter socket or CT cabinet and marked with orange.
8. The source side conduit shall be flexible non-metallic liquid tight or slip riser conduit. The riser shall be provided and installed by the member.
9. All service entrances require an external (located outside the building) lockable service disconnect switch or a lockable remote shunt device.
10. Examples of acceptable permanent identification labeling are: 1) 3M Scotchcal 220 decals or, 2) an embossed metal or engraved laminated plastic identification plate attached by screws or rivets. All lettering and numbering for the code designation shall be a minimum of 3/4 inch in height.
11. The member shall provide a NEMA Type 3R multi-metered enclosure with self-contained meter sockets appropriate to the type of service requested. All non-residential and three phase installations shall include meter sockets with a test block bypass.

12. A main disconnect shall be installed on the source side (line/utility side) of a group of seven or more-meter sockets. The main disconnect may be a fused disconnect switch, or a circuit breaker.
13. All main service disconnects on the source side (line/utility side) require factory designed and installed sealing and/or locking provisions for all areas of the enclosure, except access for switch operation.
14. The service termination section of the multi-metered enclosure shall conform to Service Equipment specifications (see drawings SS-11 or SS-12). A cover independent of any other service equipment shall be removable without disturbing adjacent panels. Terminal lugs shall be provided. The enclosure cover must be securely fastened to the box and equipped with tabs or plates for seals and locks.

Three Phase Service – 200 to 2000 Amps

1. Before any service entrance is installed on any structure, the member, builder, or authorized representative shall obtain agreement from CVEA as to where the service entrance and multi-metered equipment shall be located. All CT enclosures and meter bases shall be located on the outside of the building. The service entrance location must be near to existing CVEA facilities.
2. The member's service equipment shall conform to the latest revision of the National Electrical Code, and State and Municipal Codes. UL listing is required where applicable.
3. The source side conduit shall be flexible non-metallic liquid tight or slip riser conduit. Risers will be provided and installed by the member.
4. CVEA will supply and install the meter, meter/CT wiring, current transformers, and meter socket with test switches.
5. All service entrances require an external (located outside the building) lockable service disconnect switch. A lockable shunt trip disconnect is acceptable.

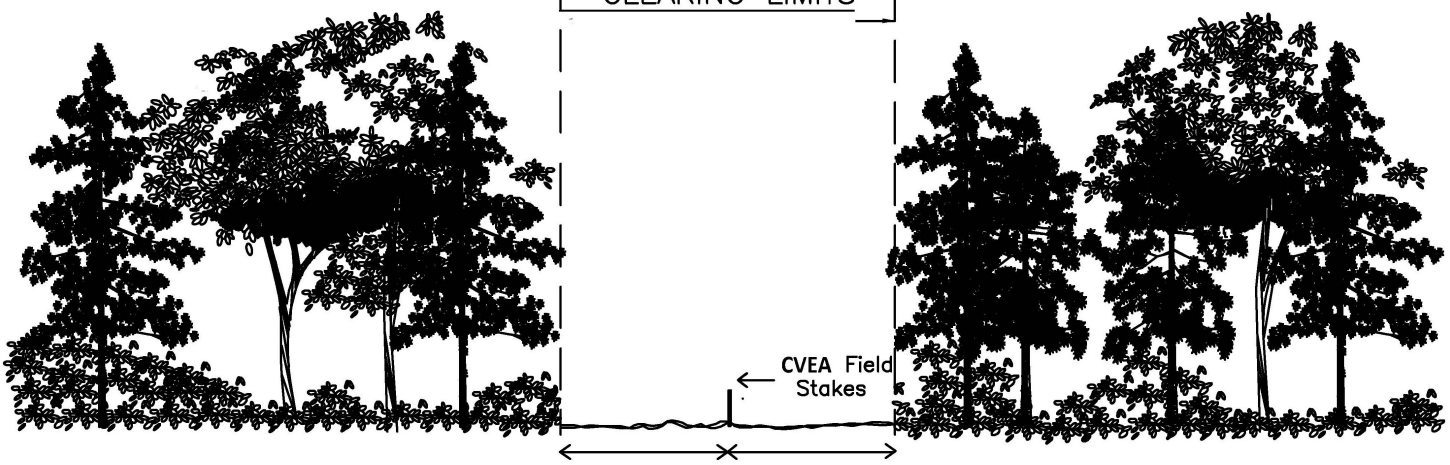
SECTION 500 DRAWINGS AND SPECIFICATIONS

501 – Service Standards Drawings

SS-1 - Line Extension Clearing Requirement - Member Property
SS-2 - Underground Clearing Requirements - Member Property
SS-3 - Overhead Clearing Requirements - Member Property
SS-4 - Developer Clearing Requirements
SS-5 - Customer Meter Stub (CMS) 200 AMP
SS-6 - Customer Meter Pole (CMP) 200 AMP
SS-7 - 400 to 800 AMP Two Post CMS (Single or Multi-gang)
SS-8 - Underground Meter Base Building Mounted 400 AMP or Less
SS-9 - Overhead Meter Base Building Mounted 200 AMP
SS-10 - Overhead Meter Base Gable Mount 200 AMP
SS-11 - Underground Service (6 Units or Less)
SS-12 - Underground Service (More than 6 Units)
SS-13 - Single Phase 400 to 800 AMP
SS-14 - Three Phase 400 to 600 AMP
SS-15 - Three Phase Underground Service 800 to 2000 AMP
SS-16 - Temporary Power Meter Base 200 AMP
SS-17 - Self-Contained Meter Socket 200 to 320 AMP
SS-18 - Current Transformer Meter Socket
SS-19 - Typical Arrangement for Standby Generators

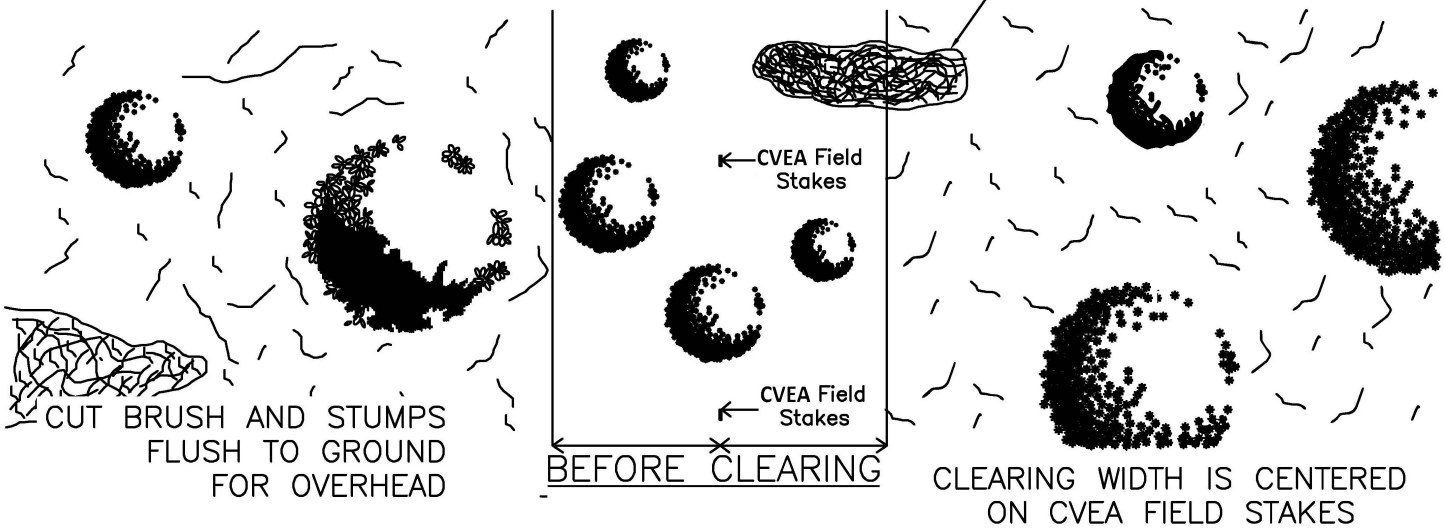
PRIMARY OVERHEAD
Single Phase = 30'
Three Phase = 30'

PRIMARY UNDERGROUND
Single Phase = 20'
Three Phase = 20'



ELEVATION

AFTER CLEARING



BEFORE CLEARING

CLEARING WIDTH IS CENTERED ON CVEA FIELD STAKES

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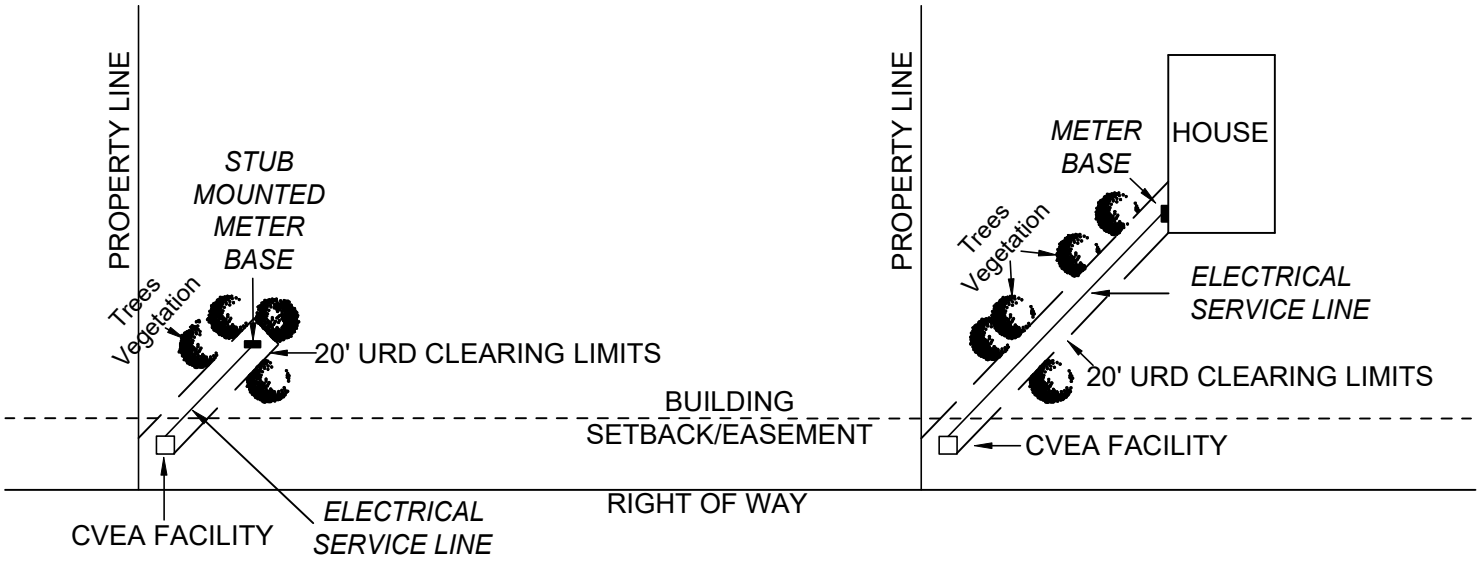
LINE EXTENSION CLEARING REQUIREMENTS
on Member's Property

DATE: 1/2026

SHEET 1 OF 1

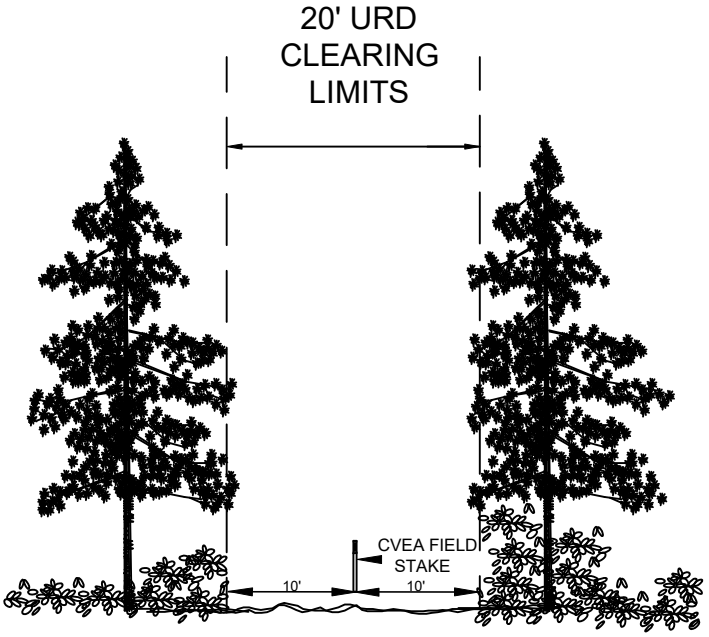
DWG NAME: SS-1

BUILDING/HOUSE MOUNT OR CMS UNDERGROUND ELECTRICAL SERVICE



****CLEARING IS NOT PERMITTED****
WITHIN 10' OF CVEA FACILITY.

****CLEARING IS CENTERED****
ON CVEA FIELD STAKES



****CLEARING IS CENTERED****
ON CVEA FIELD STAKES

NOTE:
ROOT SYSTEM FOR ALL TREES, SHRUBS AND UNDERBRUSH SHALL BE COMPLETELY REMOVED WITHIN CLEARING LIMITS

CLEARING IN RIGHT OF WAYS OR EASEMENTS ARE NOT PERMITTED BY CVEA.

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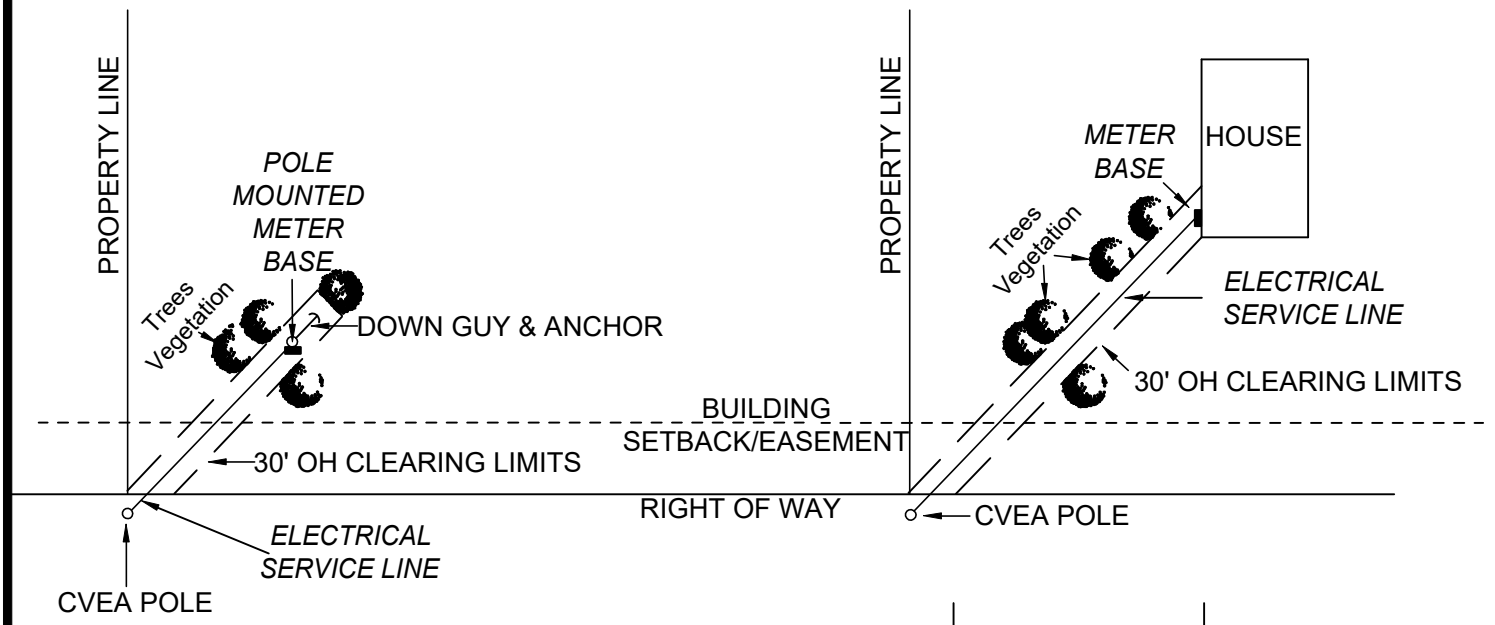
UNDERGROUND CLEARING REQUIREMENTS ON CONSUMER'S PROPERTY

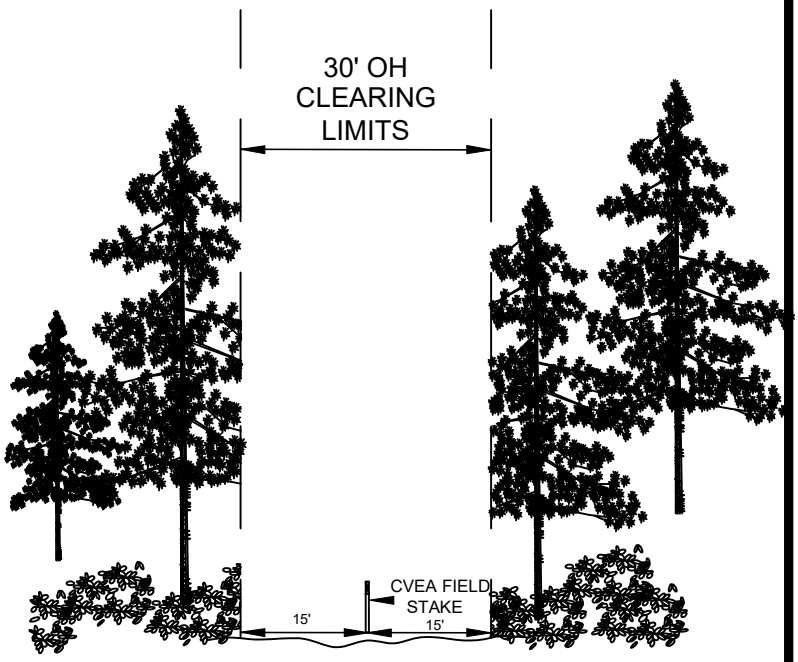
DATE: 1/2026		SHEET 1 OF 1
DWG NAME: SS-2		

BUILDING/HOUSE MOUNT OR CMP OVERHEAD ELECTRICAL SERVICE



**** CLEARING IS NOT PERMITTED****
WITHIN 10' OF CVEA FACILITY.

****CLEARING IS CENTERED****
ON CVEA FIELD STAKES



NOTE:
STUMPS AND BRUSH SHALL BE CUT FLUSH TO THE GROUND.

OVERHANGING OBSTRUCTIONS REMOVED WITHIN CLEARING LIMITS

Copper Valley ELECTRIC
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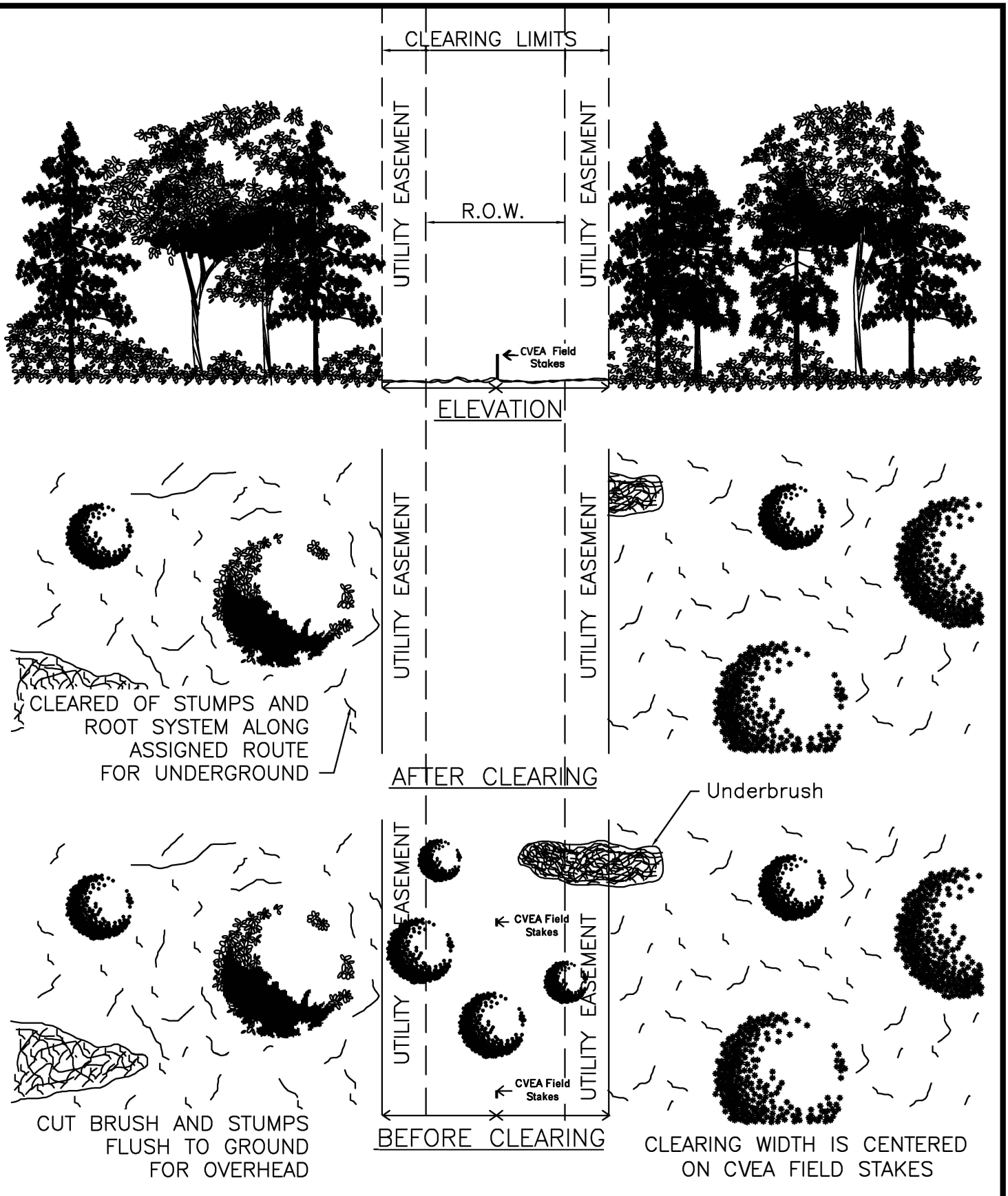
OVERHEAD CLEARING REQUIREMENTS ON CONSUMER'S PROPERTY

DATE: 01/2026		SHEET 1 OF 1
DWG NAME: SS-3		



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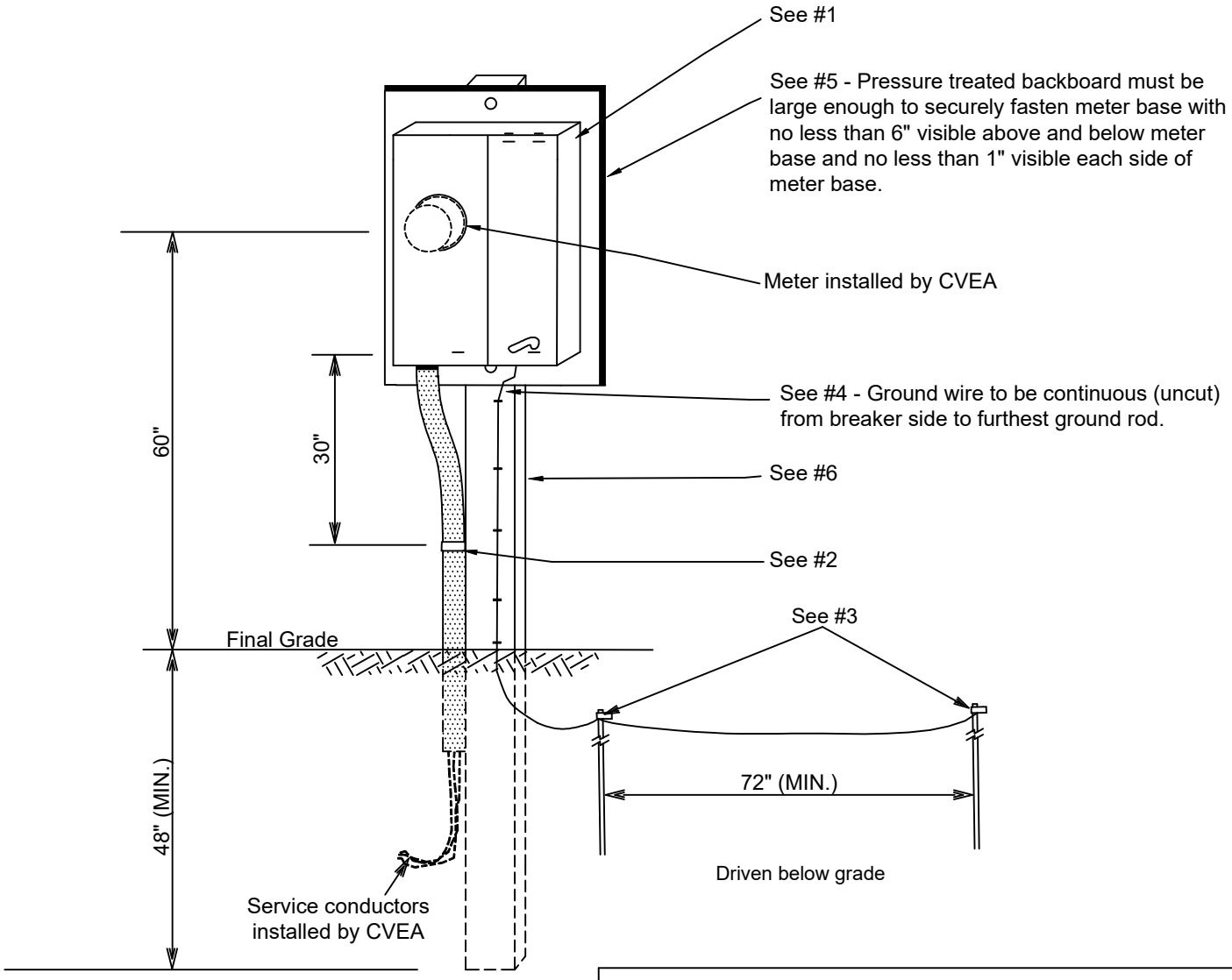
DEVELOPER CLEARING REQUIREMENTS

DATE: 1/2026		SHEET 1 OF 1
DWG NAME: SS-4		

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



Consumer Provided	
#1	NEMA 3R Outdoor Meter Main with applicable breaker installed
#2	10' 2" Non–Metallic liquid tight with connector and strap
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"
#5	3/4" Commercially pressure treated plywood backboard
#6	6" X 6" X 10' uncut commercially pressure treated post.

NOTES:

The entire CMS shall be assembled by Member and available on site for inspection by CVEA. CVEA shall set CMS. Member to attach ground wire to post, install ground rods, and connect ground wire to rods.

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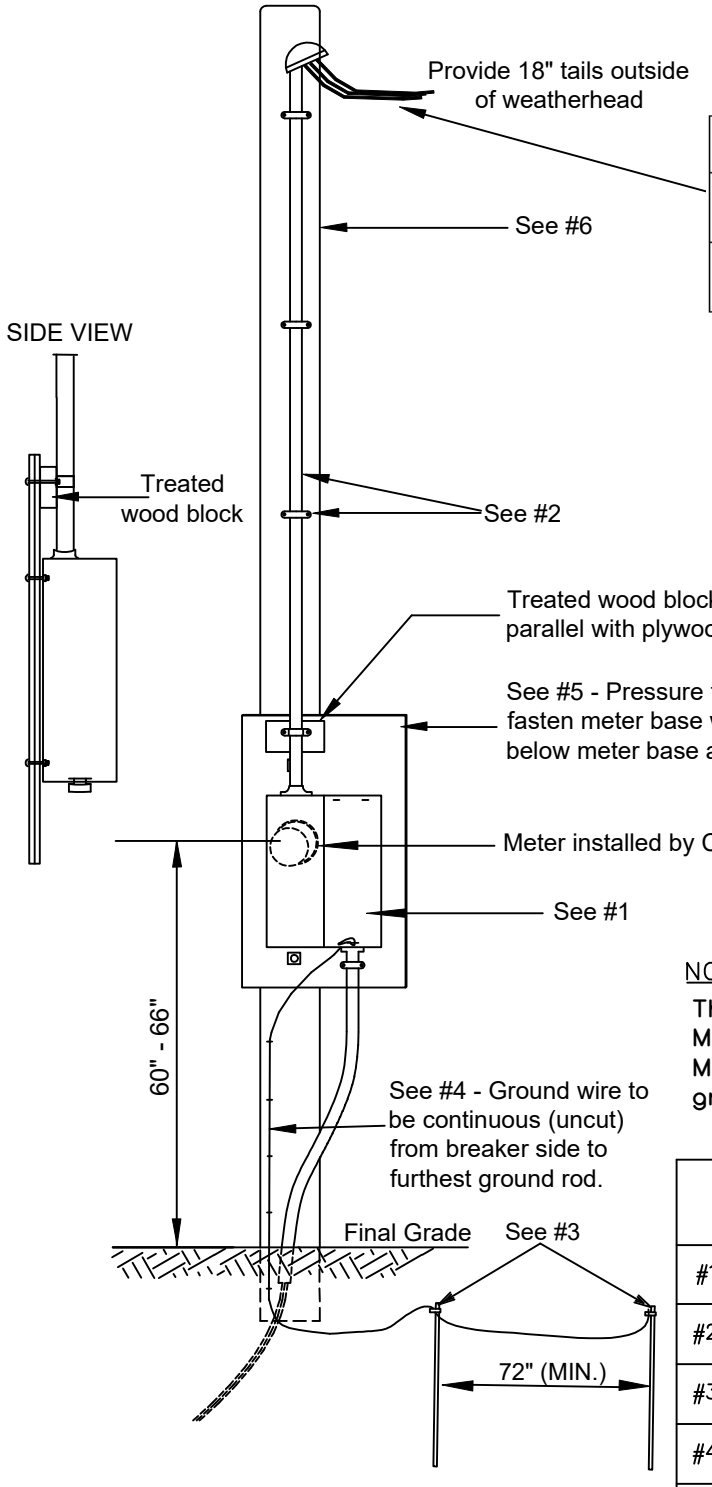
CUSTOMER METER STUB (CMS)
200 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-5

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



SERVICE SIZE	WIRE SIZE	VOLTAGE	CONDUIT SIZE
200 Amp	4/0 Aluminum	120/140 Only	2"
Member to install wire in conduit (mast) and terminate to lugs in meter base on socket side.			

NOTES:

The entire overhead meter base shall be assembled by Member and available on site for inspection by CVEA. Member to install ground wire and rods, and terminate ground wire on breaker side.

Consumer Provided	
#1	NEMA 3R Outdoor Meter Main with applicable breaker installed
#2	Galvanized 2" rigid conduit only with weatherhead – 15' and conduit clamps
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"
#5	3/4" Commercially pressure treated plywood backboard
#6	CVEA to supply meter pole (Paid by Member).

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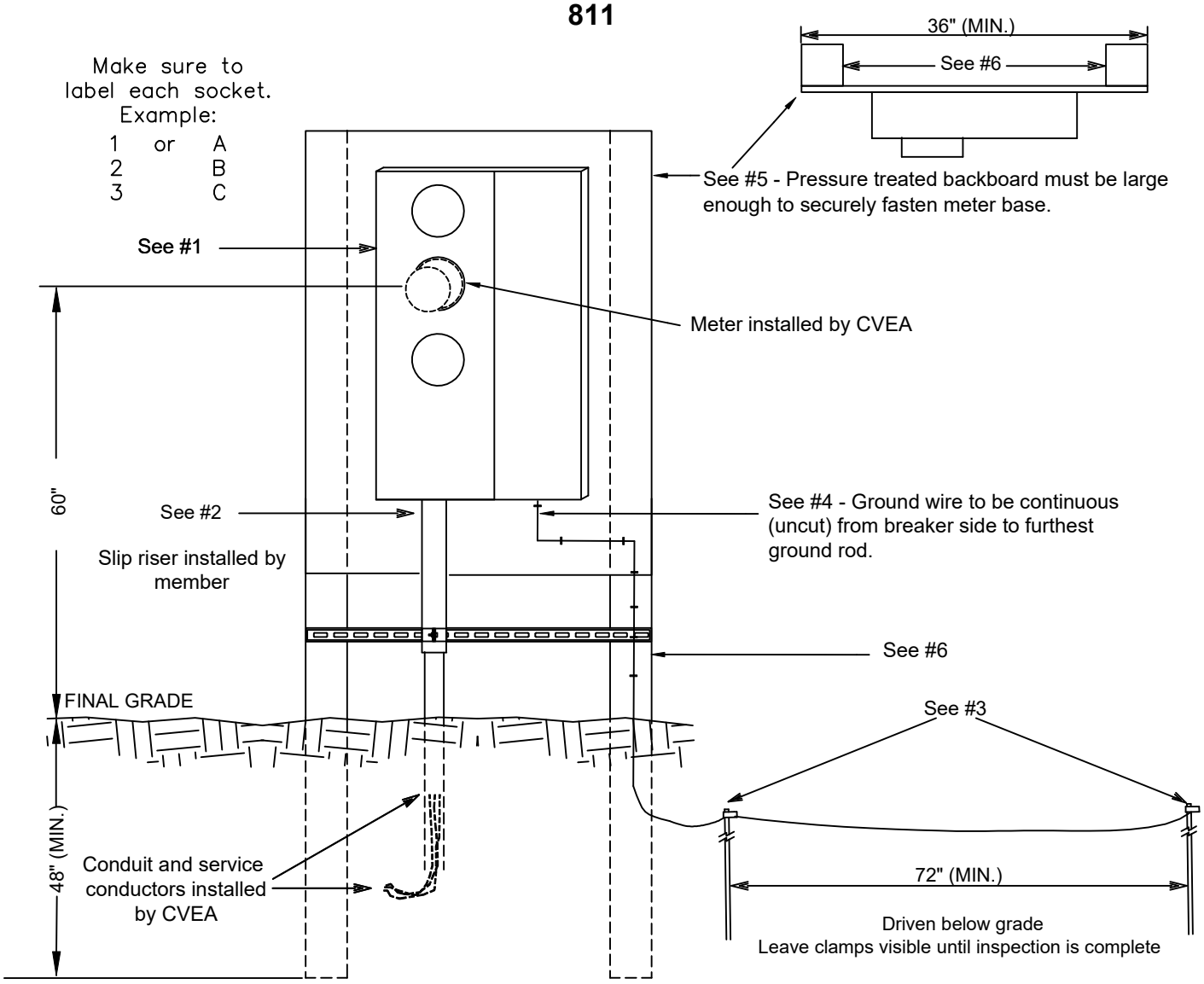
SECONDARY POLE (CUSTOMER METER POLE, CMP) 200 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-6

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



Consumer Provided	
#1	NEMA 3R Outdoor Meter Main with applicable breaker(s) installed
#2	Use 2" non–metallic liquid–tight with connector or 3" slip riser with strap. Consult with CVEA for appropriate size.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"
#5	3/4" Commercially pressure treated plywood backboard
#6	(2)6" X 6" X 10' uncut commercially pressure treated post.

NOTES:

The entire CMS must be assembled and set in ground by Member before calling CVEA for inspection. Location to be approved by CVEA.

Slip riser must have support brace, e.g., unistrut.

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400 TO 800 AMP TWO POST CMS SINGLE OR MULTI–GANG

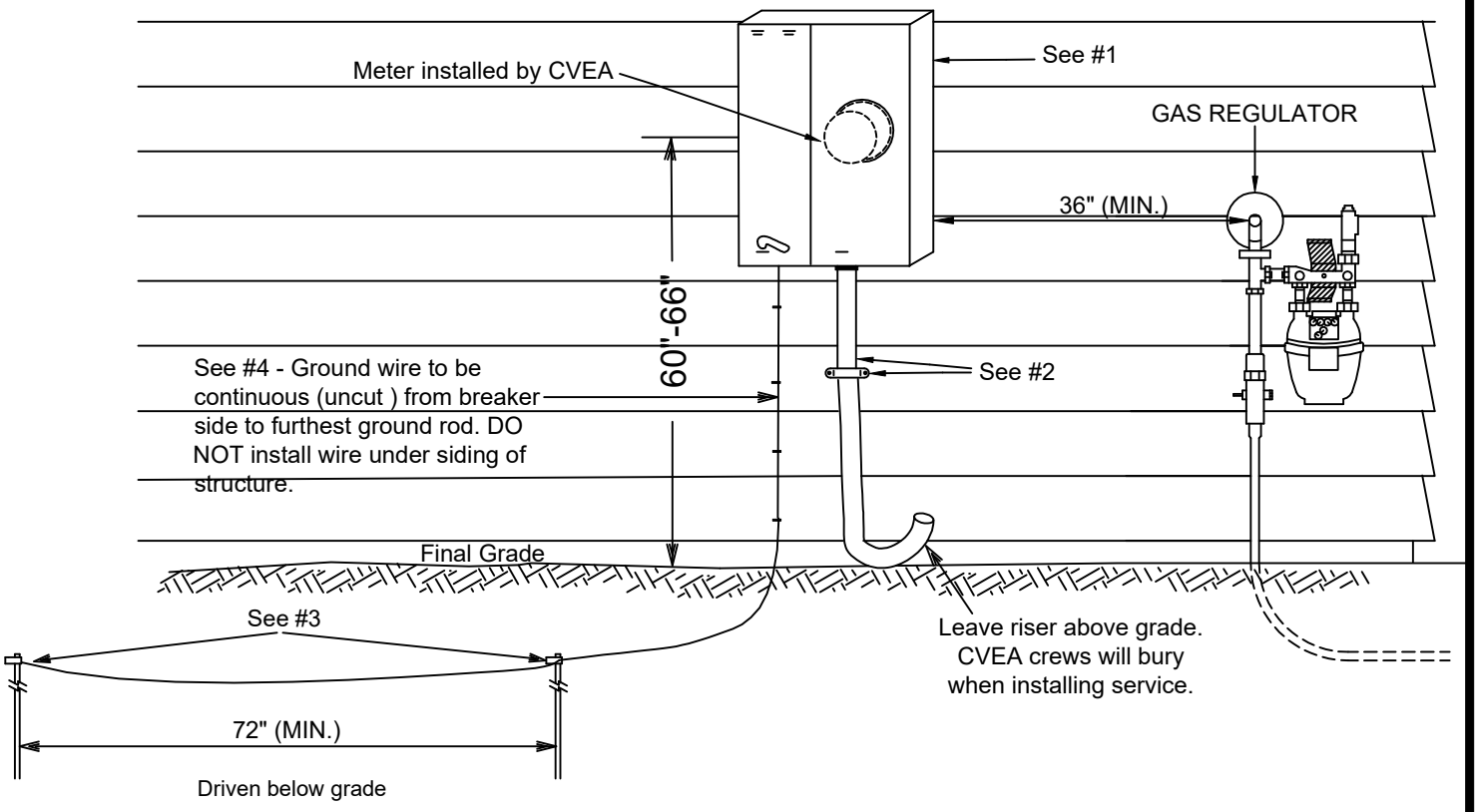
DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-7

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811

CONTACT CVEA PRIOR
TO INSTALLING METER BASE



(Leave clamps visible until inspection is complete)

NOTES:

Location of meter base to be approved by CVEA.

3' minimum separation shall be maintained from gas regulator to closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The meter base installation shall be complete before calling for CVEA inspection.

Consumer Provided	
#1	NEMA 3R Outdoor Meter Main with applicable breaker installed
#2	10' 2" Non–Metallic liquid tight or 2" or 3" slip riser with connector and strap. Consult with CVEA for appropriate size.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

UNDERGROUND METER BASE BUILDING MOUNTED 400 AMP OR LESS

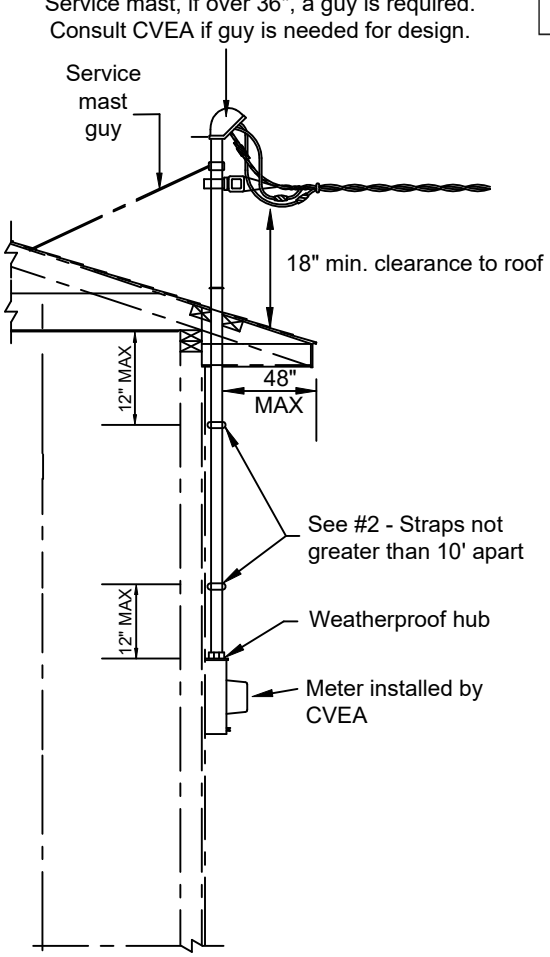
DATE: 01/2026

SHEET 1 OF 1

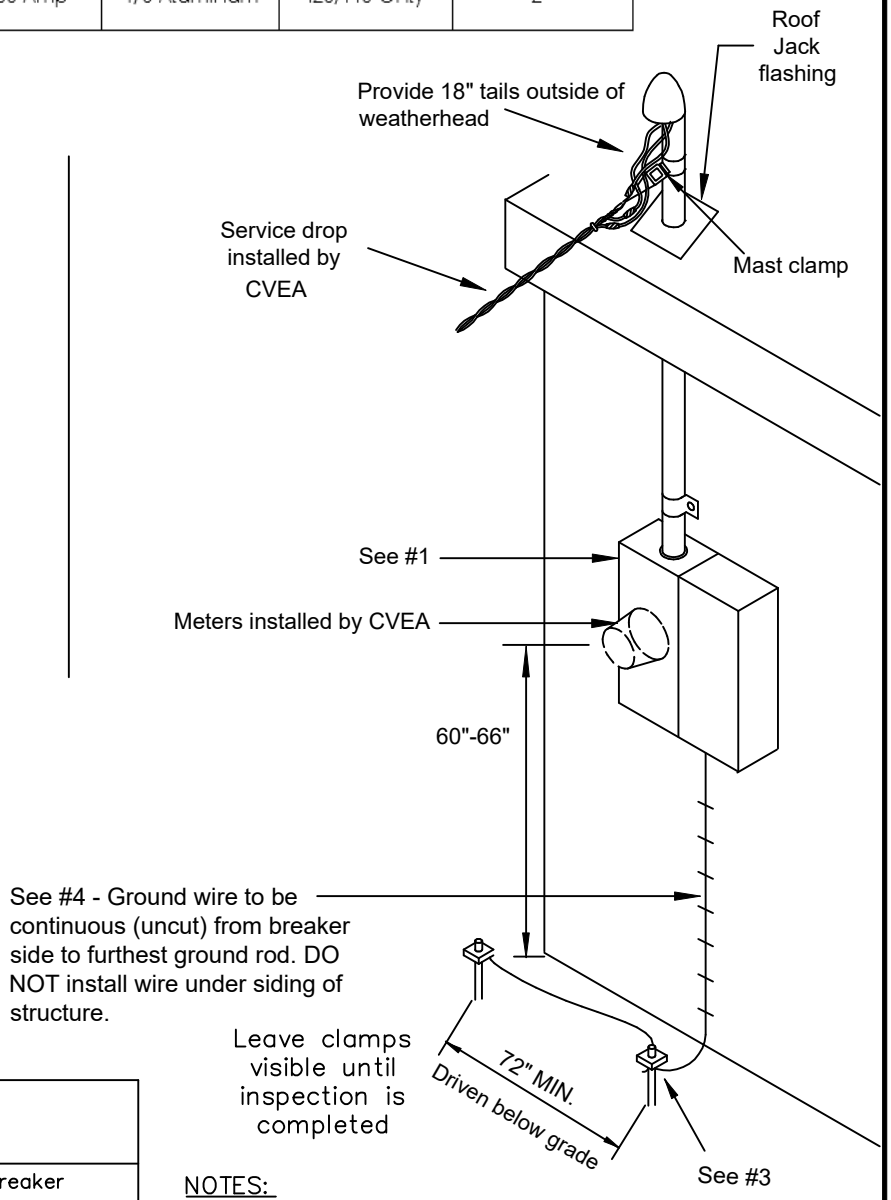
DWG NAME: SS-8

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811

SERVICE SIZE	WIRE SIZE	VOLTAGE	CONDUIT SIZE
200 Amp	4/0 Aluminum	120/140 Only	2"



CONTACT CVEA PRIOR TO INSTALLING METER BASE



Consumer Provided	
#1	NEMA 3R Outdoor Meter Main with applicable breaker installed
#2	2" galvanized rigid steel conduit and straps with weatherhead – Guy assembly if required.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"
#5	Mast clamp/wire holder

NOTES:

Member responsible to provide and install meter base and all associated materials. CVEA to provide and install service drop and meter.

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

No conduit joints above the roofline.

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

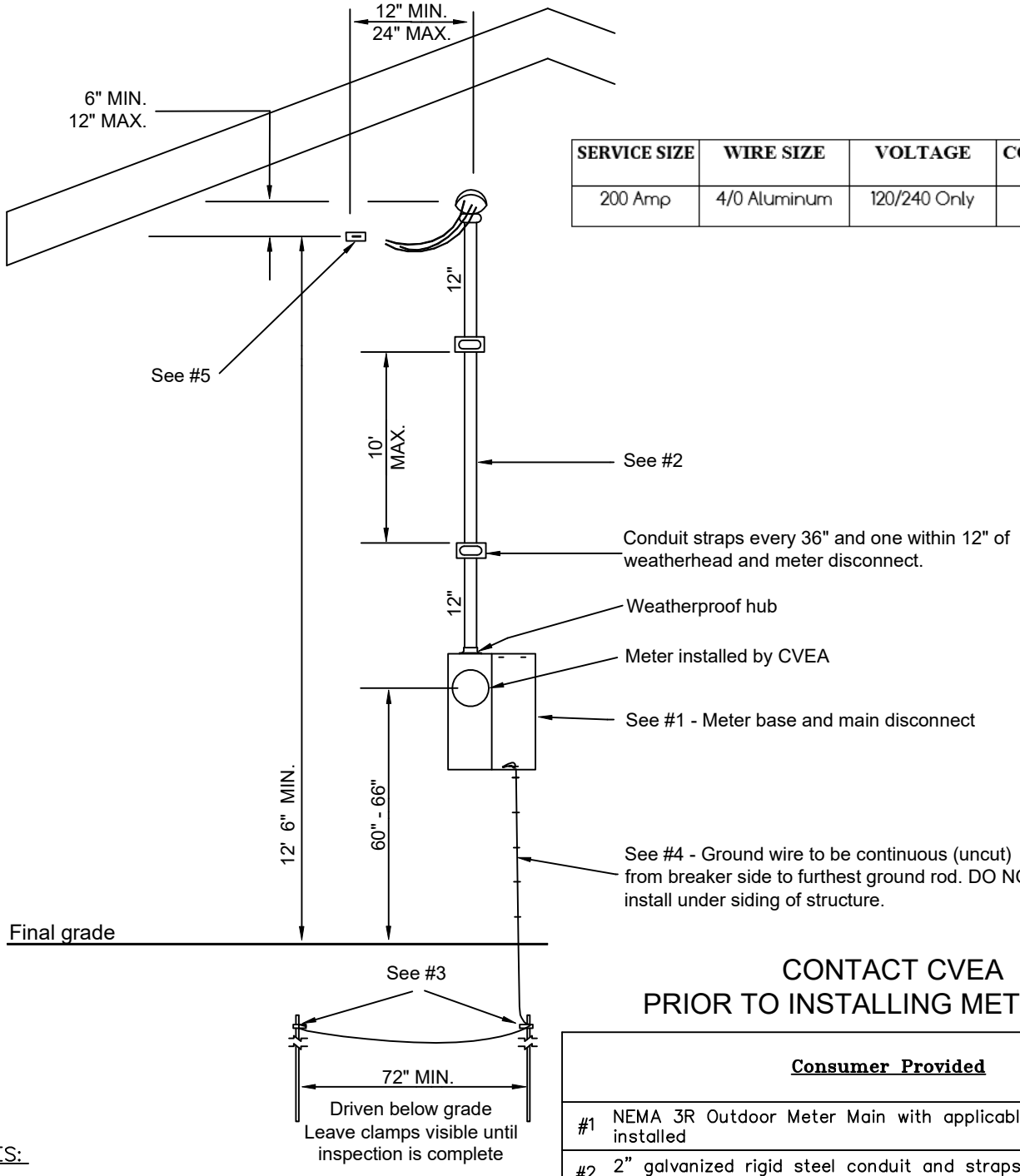
OVERHEAD METER BASE BUILDING MOUNTED 200 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-9

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



SERVICE SIZE	WIRE SIZE	VOLTAGE	CONDUIT SIZE
200 Amp	4/0 Aluminum	120/240 Only	2"

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

	Consumer Provided
#1	NEMA 3R Outdoor Meter Main with applicable breaker installed
#2	2" galvanized rigid steel conduit and straps with weatherhead
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"
#5	5/8" galvanized steel eyebolt with 2" square washers through stud or 2" x 4" block

NOTES:

The entire installation shall be assembled by Member and mounted. CVEA to provide and install service drop and meter.

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

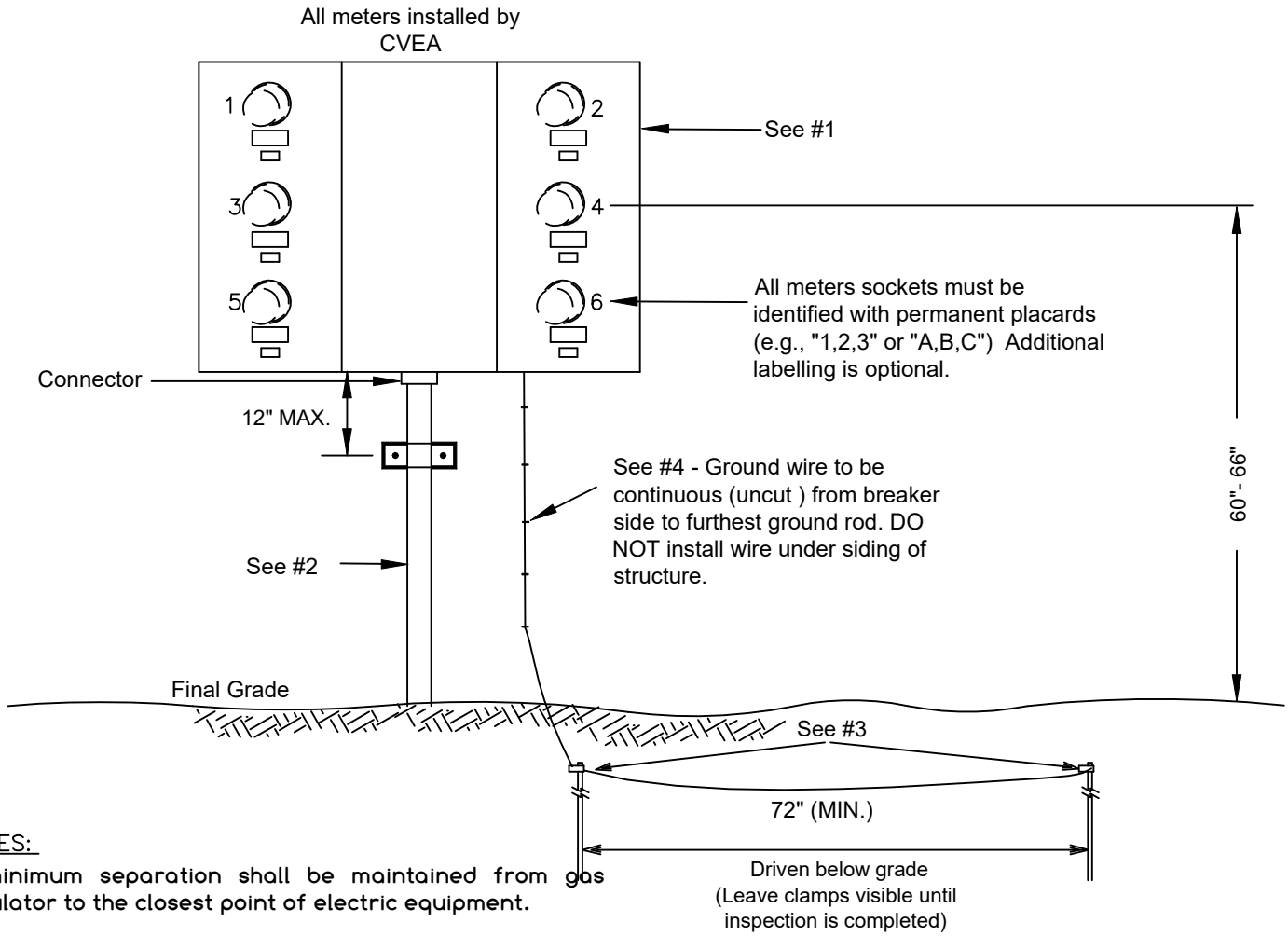
OVERHEAD METER BASE
GABLE MOUNTED
200 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-10

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



NOTES:

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The meter base installation shall be complete before calling for CVEA inspection. Location of meter base to approved by CVEA.

Multi-metered enclosure shall have no more than 4 meter sockets per vertical column.

Cover shall be removable without disturbing adjacent panels. Terminal lugs shall be provided. The enclosure cover must be securely fastened to the box and equipped with tabs or plates for seals or locks.

CVEA may require more than one service run. Contact CVEA prior to installing conduit riser.

All 3 phase meter packs shall include meter sockets with a test block bypass.

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

	Consumer Provided
#1	NEMA 3R Outdoor Meter Main with applicable breakers installed
#2	10' of 2" Non-Metallic liquid tight or slip riser with connector and strap. Contact CVEA for appropriate size. Rigid conduit NOT allowed.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. copper wire, stapled every 6"

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

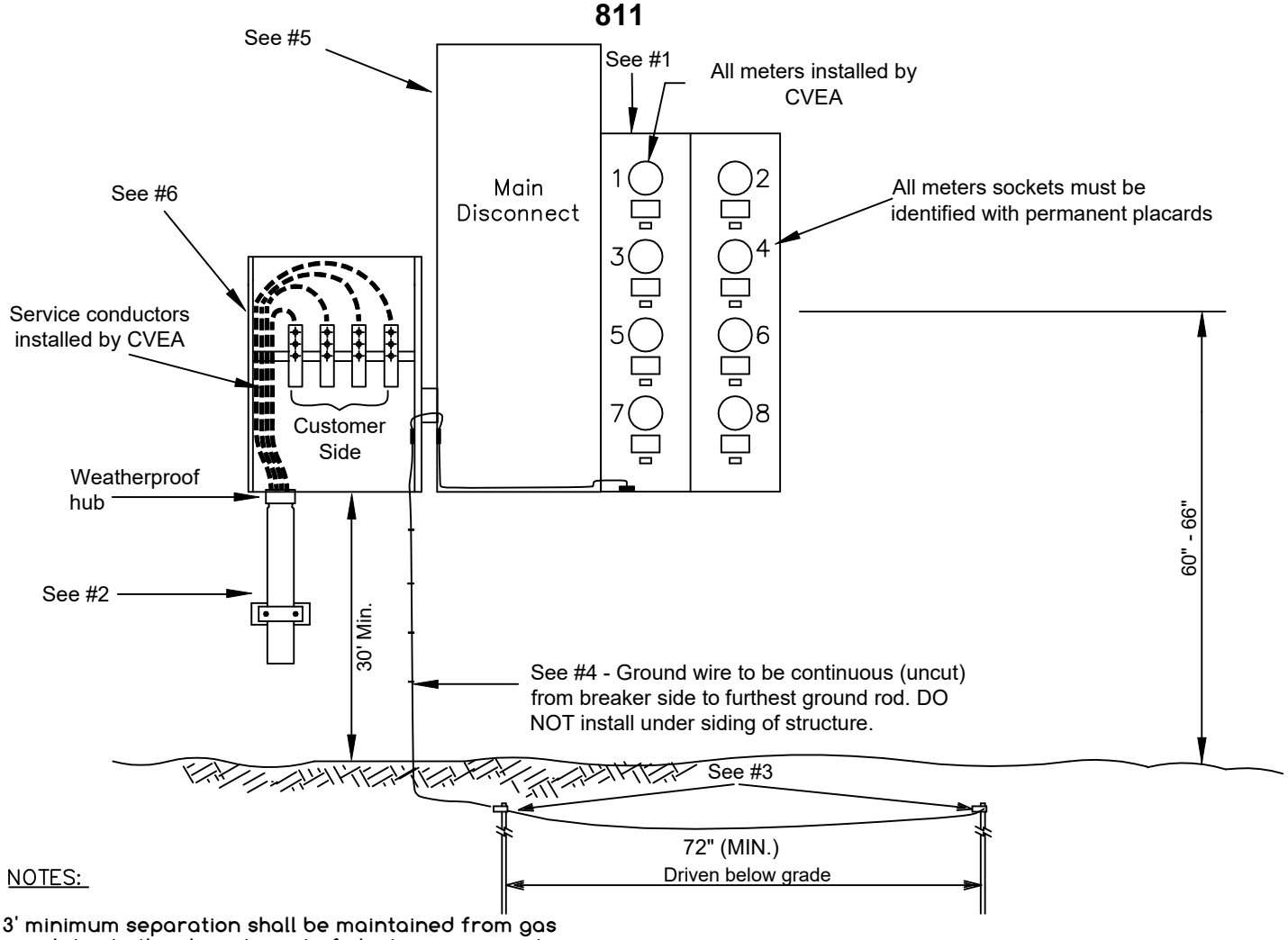
UNDERGROUND SERVICE
(6 UNITS OR LESS)

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-11

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



NOTES:

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The meter base installation shall be complete before calling for CVEA inspection. Location of meter base to be approved by CVEA.

Multi-metered enclosure shall have no more than 4 meter sockets per vertical column. CVEA will determine maximum breaker rating limits for each socket.

Cover shall be removable without disturbing adjacent panels. Terminal lugs shall be provided. The enclosure cover must be securely fastened to the box and equipped with tabs or plates for seals or locks.

CVEA may require more than one slip riser. Contact CVEA prior to installing riser.

All 3 phase meter packs shall include meter sockets with a test block bypass.

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

	Consumer Provided
#1	NEMA 3R Outdoor Meter Main with applicable breakers installed
#2	Slip riser with connector and strap. Contact CVEA for appropriate size and count. Rigid conduit NOT allowed.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. minimum copper wire, stapled every 6"
#5	Main breaker or fused disconnect
#6	Combination disconnect and termination enclosure may be substituted for separate pull box and disconnect with CVEA approval

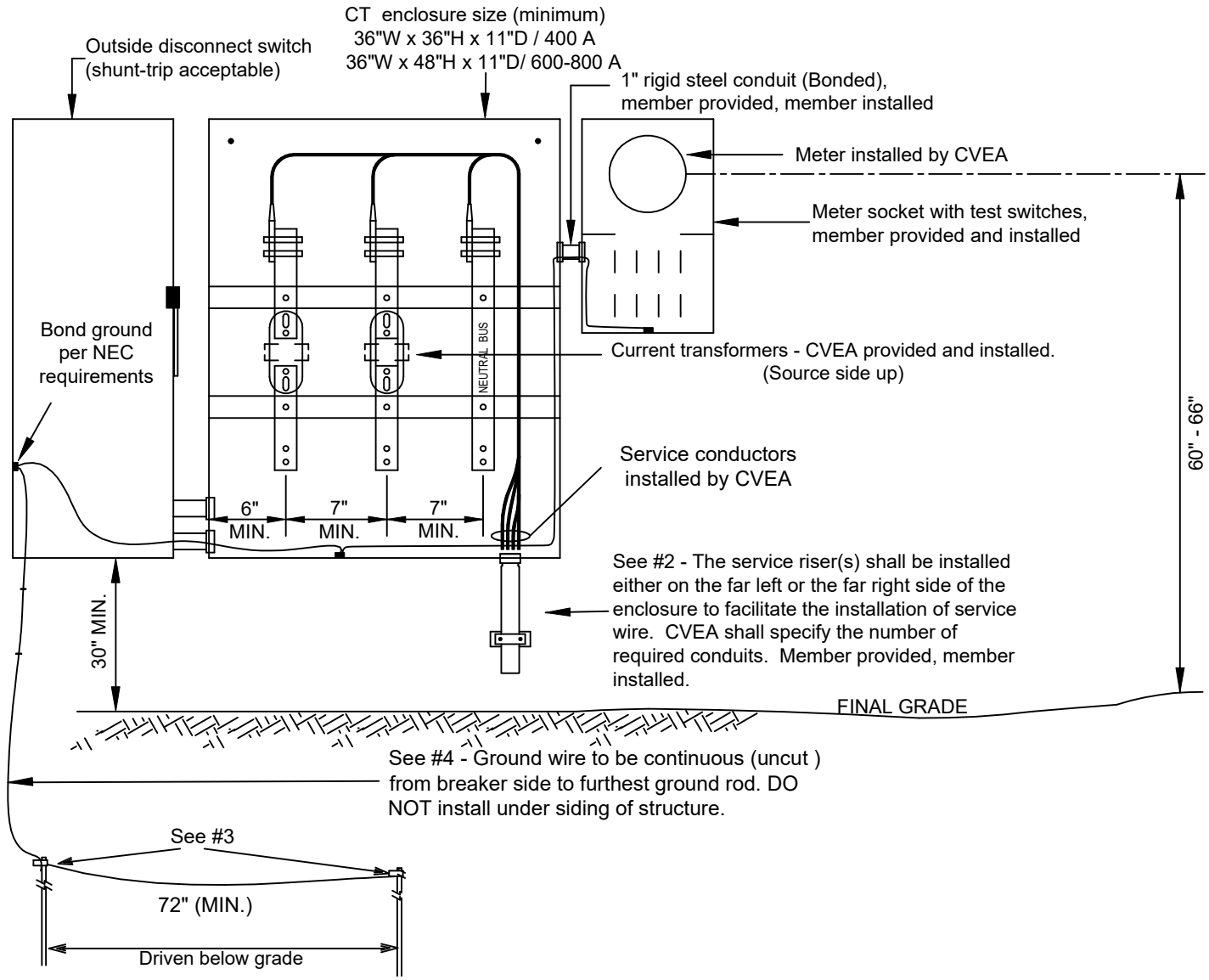
Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

UNDERGROUND SERVICE (MORE THAN 6 UNITS)

DATE: 01/2026 | SHEET 1 OF 1

DWG NAME: SS-12

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



(Leave clamps visible until inspection is complete)

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

NOTES:

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The enclosure cover must be hinged and equipped for seals and lock. (5/16" shank padlock)

All equipment shall be located on a common outside wall adjacent to each other.

Note the dimension change for the CT can on services in excess of 400 amps.

Consumer Provided	
#1	NEMA 3R Outdoor Current transformer (CT) cabinet with a minimum enclosure size as above
#2	Slip riser with connector and strap. Contact CVEA for appropriate size and count. Rigid conduit NOT allowed.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. minium copper wire, stapled every 6"

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

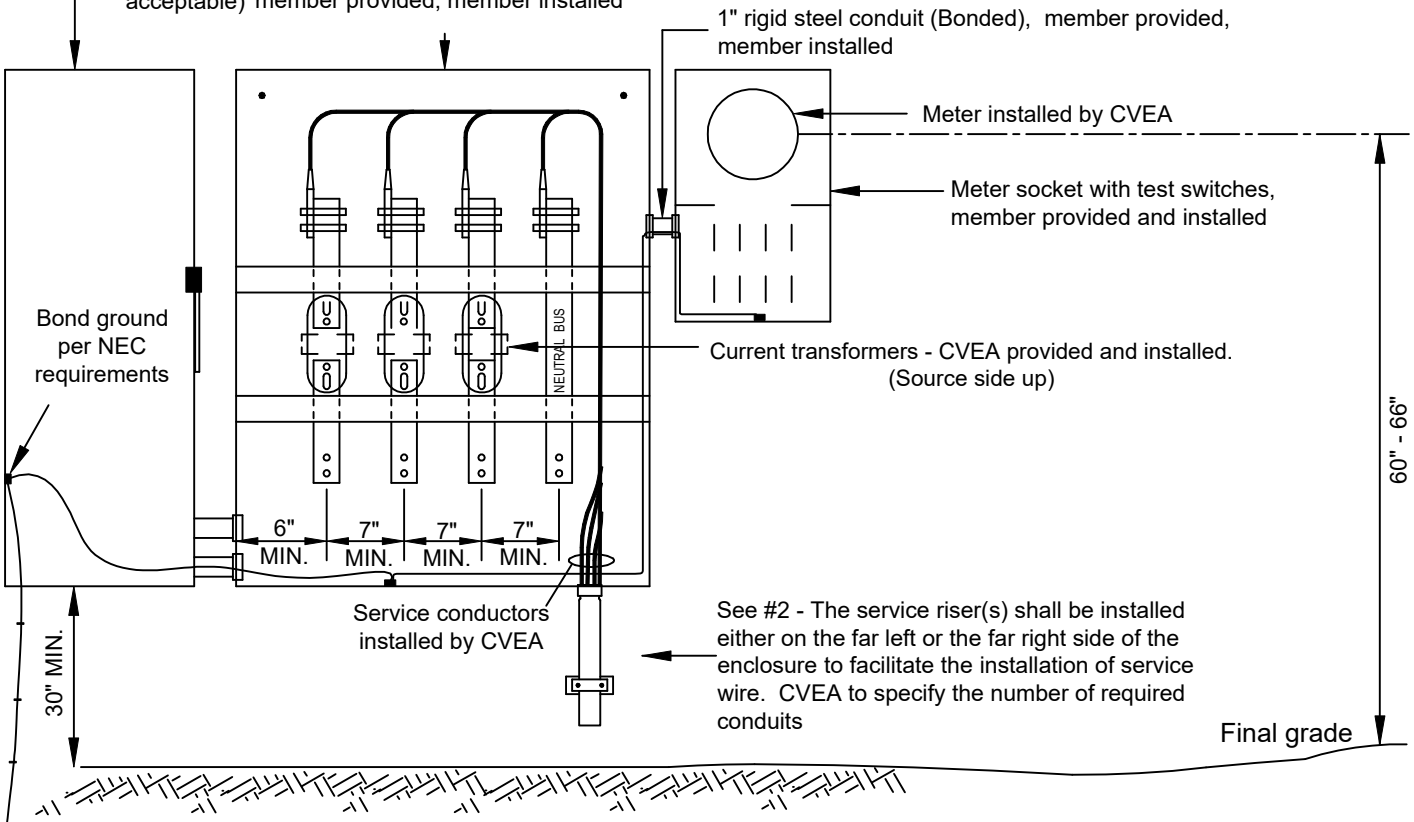
SINGLE PHASE 400 TO 800 AMP

DATE: 01/2026

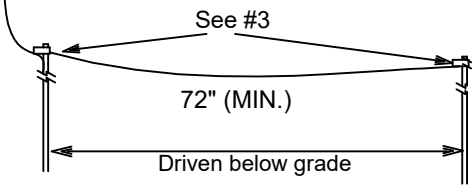
SHEET 1 OF 1

DWG NAME: SS-13

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



See #4 - Ground wire to be continuous (uncut) from breaker side to furthest ground rod. DO NOT install under siding of structure.



(Leave clamps visible until inspection is complete)

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

Consumer Provided	
#1	NEMA 3R Outdoor Current transformer (CT) cabinet with a minimum enclosure size as above.
#2	Slip riser with connector and strap. Contact CVEA for appropriate size and count. Rigid conduit NOT allowed.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. minimum copper wire, stapled every 6"

NOTES:

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The enclosure cover must be hinged and equipped for seals and lock. (5/16" shank padlock)

All equipment shall be located on a common outside wall adjacent to each other.

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

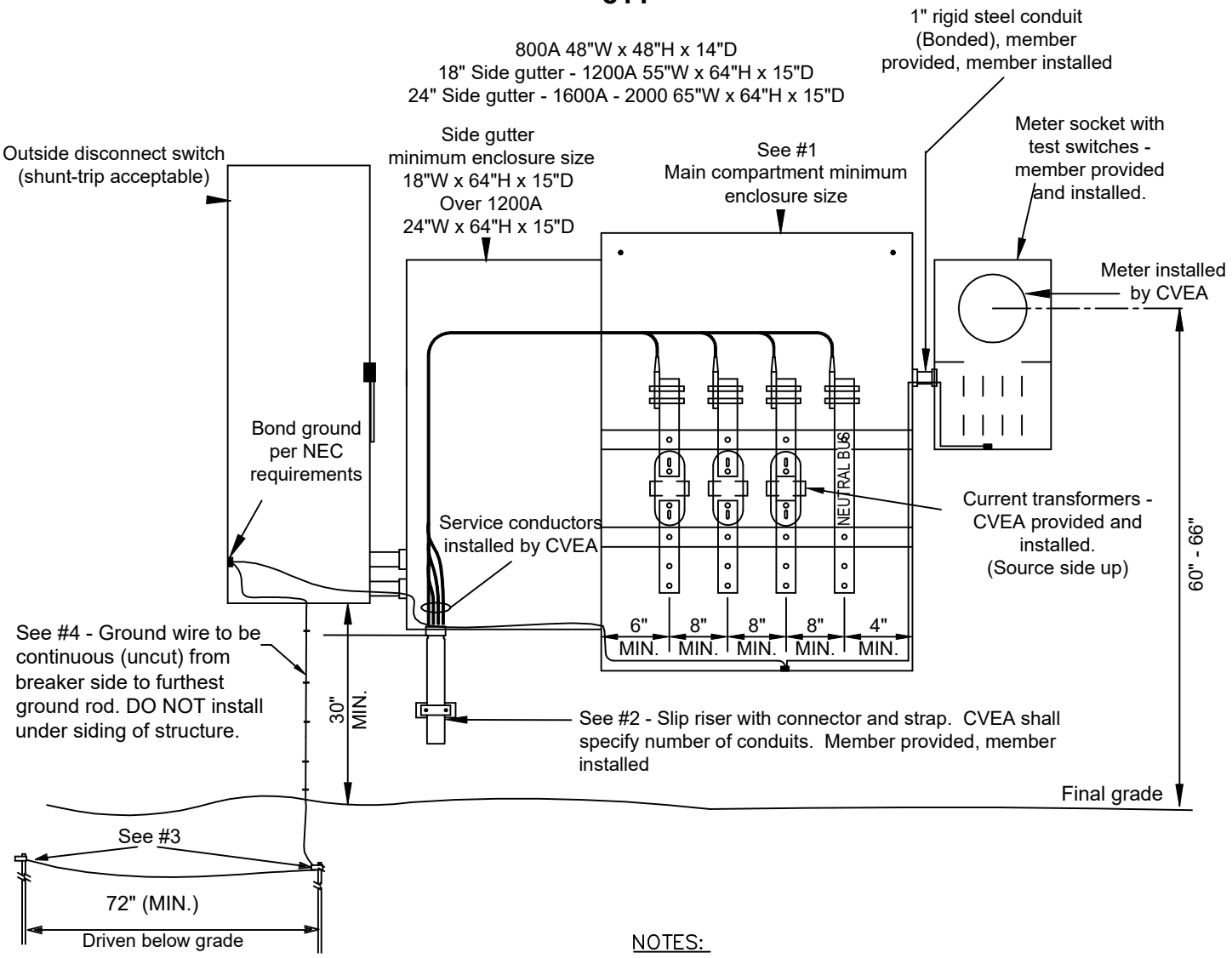
THREE PHASE 400 TO 600 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-14

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



(Leave clamps visible until inspection is complete)

CONTACT CVEA
PRIOR TO INSTALLING METER BASE

Consumer Provided	
#1	NEMA 3R Outdoor Current transformer (CT) cabinet and side gutter with minimum enclosure size as above.
#2	Slip riser with connector and strap. Contact CVEA for appropriate size. No use of rigid conduit allowed.
#3	(2) 5/8" x 8' copper clad ground rods & (2) rod clamps
#4	15' #6 A.W.G. minimum copper wire, stapled every 6"

NOTES:

3' minimum separation shall be maintained from gas regulator to the closest point of electric equipment.

Install ground rods opposite side of the CVEA service wire route.

The enclosure cover must be hinged and equipped for seals and lock. (5/16" shank padlock)

All equipment shall be located on a common outside wall adjacent to each other.

All metal equipment and conduit shall be grounded and bonded in accordance with NEC requirements.

Note the dimension change for the CT can and side gutter for 1200A and above.

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

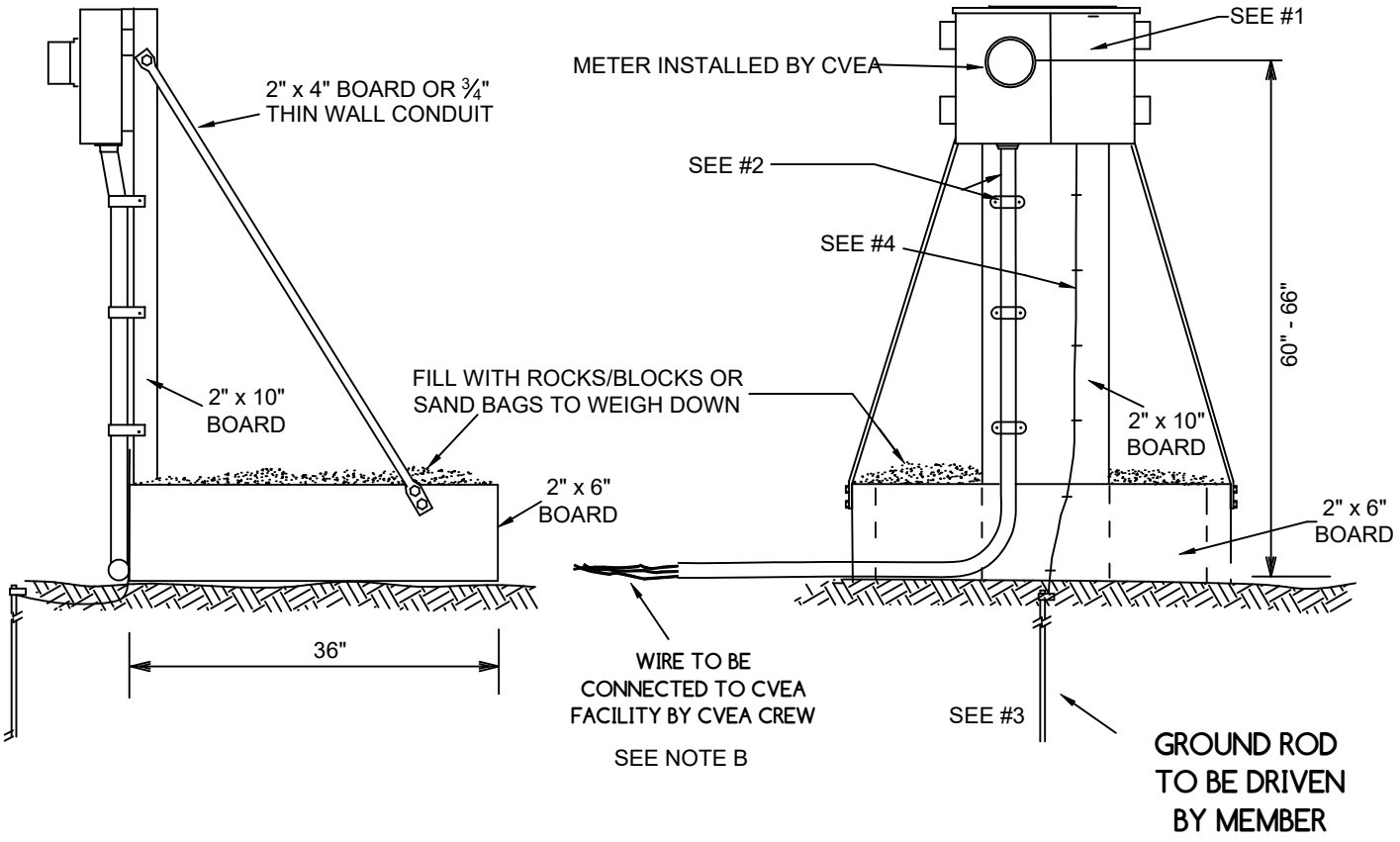
THREE PHASE UNDERGROUND SERVICE
800 TO 2000 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-15

CALL FOR UTILITY LOCATES BEFORE ANY EXCAVATION
811



NOTES:.

A. THE MEMBER SHALL CONSTRUCT AND PLACE THE METER LOOP ON SITE. MAINTAIN A 10' SEPARATION BETWEEN THE TEMPORARY METER LOOP TO ANY FACILITY. SEE CONSUMER MATERIAL PROVIDED/INSTALLED.

B. SERVICE CONDUCTORS SHALL EXTEND A MINIMUM OF 5' PAST THE END OF THE CORFLO.

- FOR PAD MOUNTED FACILITIES, USE A MINIMUM OF 20' OF CONDUIT WITH WIRE.

- FOR POLE CONNECTIONS, HAVE A MINIMUM OF 50' OF CORFLO WITH WIRE COILED AT BASE OF POLE.

- CONSULT CVEA FOR LENGTH OF CORFLO AND WIRE IF CLARIFICATION IS NEEDED.

C. CONNECT #6 A.W.G. COPPER TO BREAKER SIDE GROUND BAR.

D. DO NOT USE 4 WIRE **URD** OR **SER** TYPE CABLE FOR CVEA SIDE.

Meter Base Material	
#1	**NEMA 3R Outdoor 200A Meter Main with applicable breaker installed.**
#2	2" Non-Metallic flexible conduit with straps and wire. See Note B for length requirement
#3	(1) 5/8"X8' copper ground rod with clamp provided and installed by member.
#4	15' #6 A.W.G. copper wire

	CONDUCTOR SIZE	CONDUIT SIZE
200 Amp 120 / 240 volt	4/0 Aluminum (200A)	2"

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

TEMPORARY POWER METER BASE
200 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-16

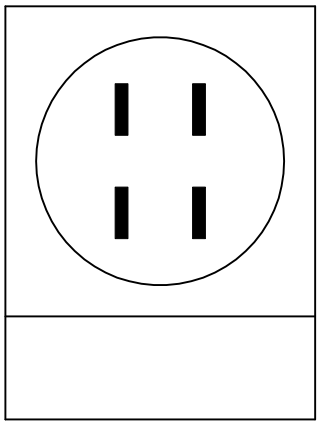


FIGURE 1

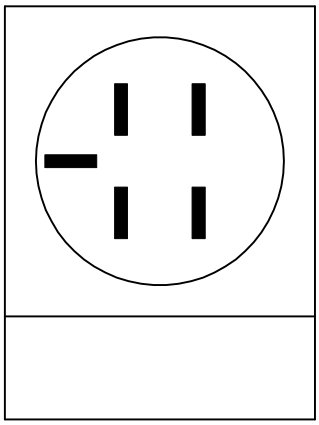


FIGURE 2

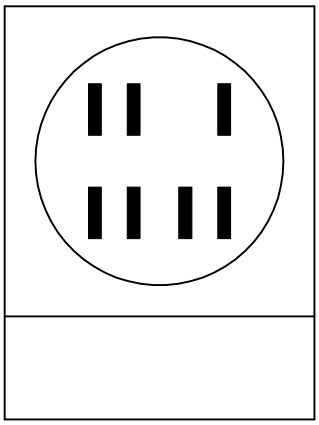


FIGURE 3

4 TERMINAL

- 120/240V, 1Ø, 3W
- 240/480V, 1Ø, 3W

5 TERMINAL

- 120/208V, 1Ø, 3W

7 TERMINAL

- 120/208V, 3Ø, 4W
- 277/480V, 3Ø, 4W
- 120/240V, 3Ø, 4W

NOTES :

1. METER SOCKETS SHALL BE RING TYPE CONSTRUCTION.
2. THE 5TH JAW OF THE 120/208V SOCKET MUST BE INSTALLED IN THE 9 O'CLOCK POSITION.
3. METER LOOPS AND SOCKETS SHALL BE PROVIDED AND INSTALLED BY MEMBER.

Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

SELF CONTAINED METER SOCKET 200 TO 320 AMP

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-17

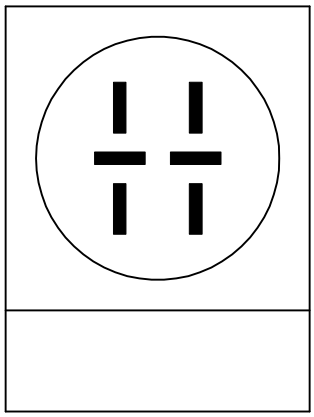


FIGURE 4

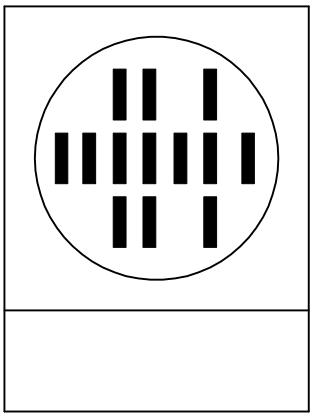


FIGURE 6

6 TERMINAL

- 120/240V, 1Ø, 3W

13 TERMINAL

- 120/208V, 3Ø, 4W
- 277/480V, 3Ø, 4W
- 120/240V, 3Ø, 4W

NOTES:

1. CT'S AND METER SOCKETS SHALL BE PROVIDED BY CVEA, INSTALLED BY MEMBER.

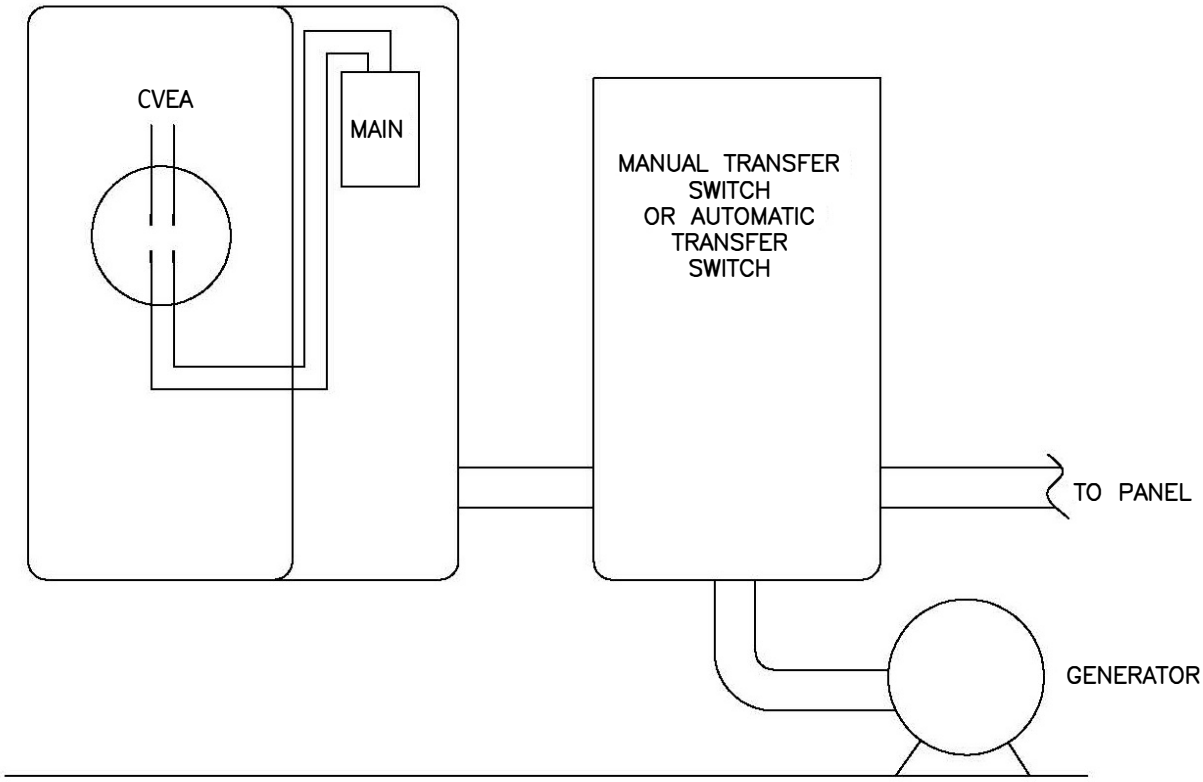
Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

CURRENT TRANSFORMER METER SOCKET

DATE: 01/2026

SHEET 1 OF 1

DWG NAME: SS-18



Copper Valley ELECTRIC
A Touchstone Energy® Cooperative

TYPICAL ARRANGEMENT FOR STANDBY GENERATORS

DATE: 1/2026		SHEET 1 OF 1
DWG NAME: SS-19		